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ABSTRACT

Fiscal year appropriations and supporting data are presented for comparative analysis of state financing of public higher education (defined as all public institutions listed in the "Education Directory, Colleges and Universities" of the National Center for Education Statistics). The report is based on the fall collection of state appropriations reported by M. M. Chambers. It presents a model of state rankings for seven independent factors plus eight derived measurements that together represent the principal state conditions and financial actions underlying and governing appropriation levels. The text explains the design of the model and its use, defines the measurements, and presents a limited macro-analysis. A technical appendix provides greater detail on data definitions; analysis and interpretation of the data is the responsibility of state and individual users. The seven factors of the model include (1) resident student source, high school graduates; (2) college attendance ratio, (3) system support index, 1981-82; (4) tax capacity, 1982; (5) tax effort, 1982; (6) allocation to public higher education, 1983-84; and (7) tuition factor, 1983-84. Tabular data are presented independently by state in rank order for fiscal year 1984, collectively by state in alphabetical order, and by state historically (1978-1984). (LB)

HOW STATES COMPARE IN FINANCIAL SUPPORT OF PUBLIC HIGHER EDUCATION 1983-84

by

Kent Halstead

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HOW STATES COMPARE IN FINANCIAL SUPPORT OF PUBLIC HIGHER EDUCATION 1983-84

Kent Halstead

This report presents current fiscal year appropriations and supporting data for comparative analysis of state financing of public higher education.[1] It is based on the full collection of state appropriations reported by M.M. Chambers.[2] The report presents a model of state rankings for seven independent factors plus eight derived measurements which together represent the principal state conditions and financial actions underlying and governing appropriation levels. Analysis and interpretation of the data is a state and individual users' responsibility.

The text explains the design of the model and its use, defines the measurements, and presents a limited macro analysis. A technical appendix provides greater detail on data definitions for financial and budget officers.

The seven factors of the model are presented in three tables. Table 1 presents the factors independently by state in rank order for fiscal year 1984. Table 2 presents the factors collectively by state in alphabetical order. Table 4 presents the factors by state historically for fiscal years 1978 through 1984. The basic data on which the factors are calculated are presented in table 3 for fiscal year 1984 and historically in table 5.

Model Description

The model is intended to report the principal factors governing state support of public higher education, to indicate how these factors interrelate and their relative importance and susceptibility to change, and, through interstate comparisons, to identify benchmarks for performance appraisal. While the individual measurements are accurate, the analysis, focused at the state level, lacks the refinement of institutional detail necessary for an authoritative study.[3] The model should therefore be used

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1/ Public higher education includes all public institutions listed in the Education Directory, Colleges and Universities, National Center for Education Statistics. To be listed, institutions must provide college-level studies, award at least an associate degree, and be accredited by a nationally recognized agency. Area vocational-technical schools not meeting these criteria are excluded.

2/ M.M. Chambers, Appropriations of State Tax Funds for Operating Expenses of Higher Education, National Association of State Universities and Land-Grant Colleges, Washington, D.C.

3/ For detail of financing revenues and expenditures by institutional type, see Marilyn McCoy and Kent Halstead, Financing Higher Education in the Fifty States, 3rd Edition (1981 data), National Center for Higher Education Management Systems, Boulder, Colorado, 1984. For ordering information contact NCHEMS Publication Department, P.O. Drawer P, Boulder, Colorado 80302 or telephone (303) 497-0390.

only as an early guide to current state financing and should be followed by more rigorous and comprehensive analysis.

The model is designed to take advantage of the early publication of state appropriations by M. M. Chambers. Additional concurrent data has been collected from State Higher Education Finance Officers to present as timely and complete an analysis as possible. Other design features include a formula structure to show the interrelationships of the variables, and state ranking and indexing to indicate relative position.

The model consists of seven independent factors (numbered) and eight derived or dependent factors (short titled). They are organized according to four functions: derivation of enrollment load, state fiscal actions, role of tuition, and total support level.

Student full-time-equivalent enrollment (ENROL) is derived by applying a college attendance ratio (#2) to state high school graduates (#1). This student count is then adjusted by a "system support index" to derive a truer measure of financial load that includes other funding requirements generally unrelated to student count, e.g., support for research and public service.

Student Enrollment (ENROL)				
Resident Student Source (#1)	x College Attendance Ratio (#2)	x System Spt. Index (#3)	=	Student Enrollment Adjusted (ENROL ADJ)

State fiscal actions in support of education involve the application of taxing effort (#5) to a state's inherent wealth or tax capacity (#4), and allocation (#6) of the resulting collected tax revenues (TAX) to higher education as appropriations (APP). Appropriations are reported on a per student basis.

Tax Revenues (TAX)				
Tax Capacity (#4)	x Tax Effort (#5)	x Allocation to Public Higher Education (#6)	=	State and Local Appropriations per Student Adjusted (APP)
ENROL ADJ				

The role of tuition is reported by the "tuition factor" (#7) which indicates the relative contribution of tuition versus appropriations. Appropriations multiplied by the tuition factor equal estimated tuition revenues (TUITION).

State and Local Appropriations Per Student Adjusted (APP	x [Tuition Factor (#7) - 1.00]	=	Estimated Tuition per Student Adjusted (TUITION)

Total financial support is labeled as an OUTPUT and equals state and local government appropriations plus tuition revenues. Reported on a per FTE student basis adjusted by the System Support Index, this total represents an overall support level of achievement which can reasonably be compared[4] state-to-state.

APP + TUITION = OUTPUT

The model is summarized as a set of INPUTS, multiplied by a PROCESS to equal the OUTPUT. The inputs are four of the independent factors (tax capacity, high school graduates, college attendance ratio, and system support index) which are relatively stable and limited to only modest change by governmental action. The process factors (tax effort, allocation to education, and the tuition factor) are adjustable by legislative action and constitute the fiscal means for yearly adjustment of state funding levels.

INPUTS	x	PROCESS	=	OUTPUT
#4/(#1 x #2 x #3)		#5 x #6 x #7		

The model is designed for the study of public higher education financing by individual states. The following analyses are suggested: (1) establishment of a state's relative position for each of the seven independent factors and determination of the consequences of a high or low position on the dependent conditions (enrollment, tax revenues, and tuition) and on final appropriations and tuition OUTPUT; (2) review of the status of INPUT conditions to determine the desirability of long-run change; (3) review of the financial PROCESS factors to determine possible immediate legislative action; (4) selection of peer states and comparison study to identify benchmarks or goals; and (5) trend analysis of factor values to determine improvement or retrograde change and to develop projections for planning.

Measurement Definitions

The model measurements are ratios using the following eight basic data elements identified by letters A through H:

A.	Population	E.	Tax Revenues
B.	High School Graduates	F.	State & Local Government Appropriations
C.	Public FTE Enrollment	G.	System Support Index
D.	Tax Capacity	H.	Estimated Tuition Revenues

(These data elements are defined in the technical appendix.)

#1--RESIDENT STUDENT SOURCE (Public and nonpublic high school graduates per 1,000 population (B/A)

4/ Comparability would be further improved by correcting for geographical differences in the prices colleges and universities pay for goods and services. Such an index, currently not available, is discussed as a note in the appendix.

A state's high school graduates are the primary source of entering freshmen at public institutions in-state and therefore the best single starting base for deriving total enrollments.

#2--COLLEGE ATTENDANCE RATIO (Full-time-equivalent enrollment in public institutions of higher education per high school graduate.) (C/B)

The college attendance ratio essentially measures the degree to which a state provides attractive public higher education opportunities to both resident and nonresident students, relative to its high school graduates. The index represents the net effect of the entrance rate of high school graduates into state institutions, in-migration of out-of-state students, the retention of students in college, and the degree to which students are enrolled part-time as opposed to full-time. The entrance of high school graduates further reflects their preparedness for college, the financial and geographical accessibility of suitable college programs, and student, parental, and community disposition toward attendance at state institutions.

ENROL--STUDENT ENROLLMENT (Full-time-equivalent enrollment in public institutions of higher education per 1,000 population.) (#1 x #2)

Student enrollment is a partial load measure. It is particularly relevant and useful in suggesting instructional and student service requirements. However, institutional quality factors, academic program level emphasis, and functions such as research and public service are not or are only marginally related to student count. Therefore enrollment is useful only as an indicator of the relative size of a state's student population and is reported here, on a per capita basis, for that purpose.

(Resident students receiving state financial aid who attend private or out-of-state institutions also constitute a load factor but are excluded from this analysis which deals exclusively with state responsibilities for financing in-state public institutions and related supporting agencies.)

#3--STATE HIGHER EDUCATION SYSTEM SUPPORT INDEX (Constructed state and local government appropriations and tuition revenues per student which are based on application of national average dollar rates by type of institution to state enrollment mix. Expressed as an index relative to the U.S. average equal to 100. Separate indexes are also reported for appropriations and tuition.) (C)

The initial measure of load is FTE student enrollment count. Other funding requirements result from institutional mission, level of instruction, and associated quality factors. Thus funding per student varies substantially because of differences in average class size, faculty salary level, instructional support requirements, public service role, administrative overhead, plant operation and maintenance, research, and hospital operations. The System Support Index is used to adjust student enrollment to derive a more accurate and comparable measure of financial load by taking into account the "costs" associated with these operational factors distinguished for each major type of institution.

Universities with large graduate and upper division enrollments, a large senior faculty, and an emphasis on research and public service, have missions that inherently require a high level of funding. Since student count measures only a portion of this load, universities appear "expensive" to operate on a per student basis. Two-year colleges, on the other hand, are much less "costly" per student because enrollment is a fairly accurate measure of load for the mission of providing instruction at the lower division. States with proportionately more students enrolled in universities have financial loads that are 10 to 20 percent above the national average. States with proportionately more students enrolled in four-year and two-year colleges have system support requirements that are as much as 10 to 15 percent below the national average.

The support index recognizes differences in appropriations and tuition support requirements for 10 types of institutions: four universities (research/hospital, research, intermediate, and small); comprehensive and general baccalaureate four-year colleges; academic and occupational two-year colleges; and health professional and other professional schools. Definition details and a table of the percent distribution of enrollments for these institutions by state is presented in the technical appendix.

The support index reports the relative average support requirement or "cost" per student a state would incur for its public system if it financed enrollment at each type of institution by the national average appropriations and tuition rate per FTE student. A system support index of 120, for example, means that the state enrollment pattern imposes a financial load per student that is essentially 20 percent greater than that of the national average enrollment pattern. Multiplying enrollments by the system support index establishes adjusted student financial load that is based on national average funding rates and is therefore relative to the U.S. average and therefore comparable state-to-state. Appropriations and tuition reported per adjusted student, relate dollars to a common load measure thereby establishing comparable per student unit funding.

ENROL ADJ--STUDENT ENROLLMENT ADJUSTED (FTE students in public institutions of higher education adjusted for system support requirements per 1,000 population.) (ENROL x #3)

This is a measure of the combined enrollment and load imposed by a state's public higher education system. Financial load is reported in FTE students adjusted for the appropriation and tuition funding requirements associated with the enrollment mix by type of institution within the state higher education system. It is assumed that a state's financial requirements for each type of institution are similar to national average appropriation and tuition rates. Where this is true, this measure establishes interstate comparability of load.

#4--TAX CAPACITY (Potential state and local tax revenue as measured by the "representative tax system" per capita.) (D/A)

This index measures the ability or potential of state and local governments to obtain revenues for public purposes through various kinds of taxes. The wealth of local residents is only one source of tax revenues; therefore, this measurement is not equivalent to per capita personal income. Tax capacity is measured here by a representative tax system that defines the

tax capacity of a state and its local governments as the amount of revenue they could raise (relative to other state-local governments) if every state-local system applied identical tax rates (national averages) to their respective tax bases. The sum of capacities for all states equals the U.S. total tax revenues collected.

#5--TAX EFFORT (State and local government tax revenues collected as a percent of state and local tax capacity.) (E/D)

Tax effort measures the percentage of state and local government tax capacity that is actually used. The tax revenues collected for all states equals total tax capacity nationwide. Since the nationwide effort measure, by definition, is 100 percent, the measures for individual states indicate how they compare in tax collection performance with the national average.

TAX--TAX REVENUES (State and local tax revenue collected per capita.) (#4 x #5)

Collected tax revenues represent the wealth available to state and local governments for public use. The index essentially identifies "rich" versus "poor" states according to current tax income. However, these designations must be tempered by the fact that some states have far greater social needs than others. This increases the competition for funding among alternative uses. Even "rich" states may experience scarce dollars in financing certain public programs. Some apparently "poor" states, on the other hand, may have less than average public service requirements so that support dollars are more readily available. Also price differences among the states affect the purchasing power of government revenues. Although a "geographical price index" is not currently available, its importance warrants discussion, as is noted in the technical appendix.

#6--ALLOCATION TO PUBLIC HIGHER EDUCATION (percent of state and local government collected tax revenues that are appropriated or levied for operating expenses of public higher education.) (F/E)

This ratio suggests the relative importance of financing public higher education to the funding of other public services in the state and local government budget. The case for greater allocation must be made against competing claims of other public service programs. Accordingly, evidence that education should receive a greater share of the state budget is suggested by relatively lower appropriations per student compared with more favorable unit funding of other public services.

APP--APPROPRIATIONS PER STUDENT (State and local tax revenues appropriated or levied for current operating expenses of public higher education per FTE public student. Reported in actual dollars per student and in dollars per student adjusted for system cost.) (TAX x #6/ENROL)

This measure of appropriations[5/] relative to enrollment and financial load suggests the commitment of tax revenues of state and local governments to support public higher education consistent with available funds and

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5/ See "Basic Data Description" section for description of appropriations collected by M. M. Chambers.

expressed need. The level of appropriations should be judged as the major source of funding for public institutions. However, since some states rely heavily on student tuition to offset lower appropriations, total funding from both sources should be recognized as a more comprehensive measure of support for interstate comparisons. Also reported is the FY 1978 to FY 1984 6-year trend of appropriations per actual student in constant dollars. The deflator used was the increase in the Higher Education Price Index (HEPI)[6/] for FY 1978 to 1983 and an estimate of 7 percent for FY 1983 to 1984 for a derived 6-year inflation rate of 64 percent. Dividing FY 1984 by FY 1978 appropriations and then by 1.64 equals the 6-year percent change of appropriations in dollars of constant institutional purchasing power.

#7--TUITION FACTOR (Ratio of state and local government appropriations plus student tuition revenues to state and local government appropriations.) (H)

This ratio reports the relative roles of tuition and appropriations in state financing of higher education. A value of 1.25, for example, means that tuition revenues equal 25 percent of state and local government appropriations. Higher ratios often reflect a large proportion of out-of-state students paying higher non-resident tuition rates. To some extent, the ratio reflects the balance a state places on the returns of higher education to the individual versus society and the resulting expected proportional payment. High values reflect the position that the individual is the primary benefactor of his education and that students and their parents should, accordingly, pay for most of the costs. Low values reflect the position that large social benefits result from higher education and that state and local governments should recognize these returns through a high appropriation subsidy.

TUITION--ESTIMATED TUITION PER STUDENT (Tuition and fee revenues of public higher education per FTE public student. Reported in actual dollars per student and in dollars per student adjusted for system support requirements.) APP(TUITION FACTOR - 1.00)

Tuition revenues, net of state appropriated student financial aid, represent the student buyer's payment for education services received. The absolute level of tuition should be consistent with benefits derived, ability to pay, and interpreted balance between individual and state returns. High tuition can be justified during financial difficulties by the need to fully tap every source. Yet many states believe high tuition is inimical to the basic concept of equal opportunity, and they establish low charges to provide easy access and prevent financial hardship.

Since tuition charges vary by type of institution, the mix of institutions within a state public higher education system will affect revenues from this source. To establish interstate comparability, actual tuition dollars per student are corrected by the tuition component of the System Support Index (#3).

6/ The Higher Education Price Index is published annually in September by Research Associates of Washington, 2605 Klingle Rd. N.W., Washington, D.C. 20008.

OUTPUT--APPROPRIATIONS AND ESTIMATED TUITION REVENUES PER STUDENT ADJUSTED (Estimated student tuition revenues and state and local tax revenues appropriated for current operating expenses of public higher education per FTE student adjusted for system support requirements.) (APP + TUITION)

Tuition and appropriations, which reflect the primary financial commitment of state residents (and non-resident attending students) to support public higher education, account for approximately 88 percent of current operating expense revenues (current funds revenues minus government grants and contracts and sales and service revenues) of public institutions. As adjusted by the System Support Index, the dollar amounts per student are generally comparable state-by-state except that no correction has been made for differences in costs due to geography. Variations in the level of support contribute to the quality and amount of education, research, and services provided, and reflect efficiency of operations and economies of scale achieved by larger state systems.

INPUTS--POTENTIAL TAX REVENUES PER STUDENT ADJUSTED (Potential tax dollars per FTE student adjusted for system support requirements.) (#4/#1 x #2 x #3)

The four input factors (resident student source, college attendance ratio, system support index, and tax capacity) together establish a state's basic tax potential to finance public higher education relative to student enrollment load. These factors are relatively stable inherent state conditions generally subject to only modest or slow alteration. States with high INPUT levels have great economic potential to finance public higher education through a combination of high tax capacity and relatively low student enrollment. States with a low capacity load ratio must fully tap a modest potential if public institutions are to be adequately supported.

PROCESS--COLLECTIVE FINANCIAL ACTIONS (Percent utilization of INPUT factors to equal OUTPUT.) (#5 X #6 X #7)

The combined PROCESS factors (tax effort, allocation to public higher education, and tuition factor) are the financial actions that establish the degree to which the INPUT potential tax dollars per student are actually utilized to achieve the OUTPUT support level provided. These three factors are subject to modification through legislative and/or institutional decisions. States with high PROCESS levels are making a great effort to finance public higher education, often because of low INPUT conditions. States with with low PROCESS percentages either can afford to do so because of excellent INPUT conditions or are satisfied with relatively low financing.

General Macro Findings

The model is designed for individual state analysis by local higher education finance officers, legislators, and citizens. Beyond this macro focus, some general observations can be made regarding the overall (macro) role of state governments and students in financing public higher education.

Variance. Variance is defined here as the mean deviation (from the U.S. average) of the highest five and lowest five states for any given measure. Among the PROCESS factors, #6, Allocation, has the greatest variance, ±48.9 percent (+55.2% to - 42.6%), followed by #5, Tax Effort, ±37.8 percent, and #7, Tuition Factor, ±31.2 percent. This greater latitude in allocation practices among states contributes more to the variation in resulting funding levels than any other controllable fiscal factor.

The INPUT factor showing greatest variance is #4, Tax Capacity, ±66.7 percent (+108.8% to - 24.6%) which dramatizes the great disparity among states in tax wealth due primarily to recent increases in value of mineral deposits. The College Attendance Ratio, #2, also has a large variance, ±42.0 percent, showing that some states have become heavily involved in the "business" of higher education, while others have chosen to be "debtors" by encouraging their residents to attend out-of-state as well as local colleges. Low variance occurs for factor #1, Resident Student Source, ±20.4 percent, and factor #3, System Support Index, ±17.9 percent.

Relationship Between OUTPUT, INPUTS, AND PROCESS. INPUTS and PROCESS factors have an inverse relationship. States with high INPUTS can and generally do have low PROCESS values. Yet the INPUT conditions are so favorable that the resulting OUTPUT usually remains high. Thus, wealthy states with few students generally provide higher than average financing.

States with low INPUT conditions must and do have high PROCESS actions that produce a wide range of OUTPUT levels. Poor states with many students must struggle to raise even average-level appropriations and tuition.

Key INPUT Factors. States with high INPUT levels (high tax dollars per student adjusted) usually have a good Tax Capacity plus a combined low College Attendance Ratio and low System Support Index resulting in a low student load. Low INPUT levels are usually the result of an above average College Attendance Ratio and System Support Index resulting in a high student load, plus average to low Tax Capacity. The College Attendance Ratio is the most important INPUT factor; it also exhibits a substantial range. These conditions establish remarkably different capabilities to fund education relative to load, ranging from Alaska with nearly $150,000 potential tax dollars per FTE student adjusted, to Nebraska with only $22,000 per student.

Key PROCESS Factors. Of the three PROCESS factors, the Allocation Rate, as expected, is the strongest financial action taken by states in financing higher education. States with a high PROCESS level allocate large percentages of their collected tax revenues to higher education, although there are many exceptions (e.g., Vermont which relies on a high Tuition Factor). Low PROCESS states invariably have low Allocation Rates. Neither Tax Effort nor the Tuition Factor appears to correlate significantly with

the final PROCESS level. No state has high values for all three PROCESS factors. Wisconsin and Arizona come closest, ranking 5th and 20th in Tax Effort, 20th and 5th in Allocation Rate, and 16th and 25th in the Tuition Factor respectively.

Wealth and System Cost. With the exception of Hawaii, the seven richest states in the union in tax revenues operate the least expensive public higher education systems. Alaska, New York, Wyoming, District of Columbia, Massachusetts, New Jersey, and California emphasize attendance at 4-year and 2-year colleges with resulting system appropriation support requirements (at national average rates) from 5 to 14 percent below the U.S. norm. Where funding requirements are high, the cause is often a historically predominant university structure and a relatively small 2-year college system rather than inherent state wealth. A separate medical center (as opposed to one integrated within a university) also increases system support requirements because of the duplication of facilities, specialized salary schedules, and diseconomies due to relatively small size.

Relationship Between Appropriations and Tuition. High appropriations can be accompanied by either high tuition (New York) or low tuition (District of Columbia). Low appropriations, however, are often compensated for by high student charges as in the case of New Hampshire, Vermont, and Colorado.

Achievement Records. Seven states--Arizona, Mississippi, Nebraska, Wisconsin, Alabama, Utah, South Carolina--have done the most with the least. Ranking lowest in INPUTS and highest in PROCESS, these seven states have done their best to respond to an exceptionally difficult financing challenge. New York also deserves special notice for having responded to high INPUT conditions (13th) not with a typical low PROCESS level but with an equally high PROCESS (14th).

In terms of performing least with the most resulting in low funding, New Hampshire has high INPUT conditions (11th) yet responds with an extremely low PROCESS (50th) leading to a low OUTPUT (39th).

Trends. The time span of six years for which data is provided is sufficient to reflect major trends. The data of tables 4 and 5 for fiscal years 1978 and 1980 through 1984 generally reflect modest and irregular changes. Occasionally a sharper consistent change in one or more measures may occur in a particular state. These should be noted and the consequences of their possible continuation considered.

Of special importance is the maintenance of purchasing power. The [illegible]-year change in appropriations per student in constant dollars is reported in table [illegible]. Inflation of [illegible] percent for 1978-84 was estimated based on the [illegible] change in the Higher Education Price Index and a one-year projection for 1983-1984 of [illegible] percent. Nationally, appropriations per student in constant dollars for the six-year period were stable ([illegible]). However, in [illegible] states the purchasing power of appropriations per student declined more than 10 percent. This erosion in financing is an exceptionally serious problem resulting in reduction [illegible] service to students and lower faculty salaries which can never be made up for the period and individuals involved.

TECHNICAL APPENDIX

The appendix material provides definition details of interest to financial officers and researchers.

Basic Data Description and Release Schedule

The eight elements of data used in the model are identified by an alphabetical letter and described in this section. The time relationships among data are shown below.

		1982	1983	1984
A	Population	July		
B	High School Graduates			
C	Enrollment		Fall	
D	Tax Capacity			
E	Tax Revenues	FY		
F	Appropriations			FY
G	System Support Index	FY		
H	Estimated Tuition Revenues			FY

A. Resident Population (in thousands)

Source: Current Population Reports, Population Estimates and Projections, U.S. Department of Commerce, Bureau of the Census, Washington, D.C.

B. No. of Graduates (public and nonpublic). Excludes special diploma certificates and graduates from other programs

Source: Statistics of Public Elementary and Secondary Schools and Statistics of State School Systems, U.S. Department of Education, National Center for Education Statistics, Washington, D.C.

High school graduates were reviewed by State Higher Education Finance Officers (SHEFO).

C. Full-Time Equivalent Enrollment in Public Institutions of Higher Education.

Source: Fall Enrollment in Higher Education, 19 , U.S. Department of Education, National Center for Education Statistics, Washington, D.C.

Only students attending collegiate institutions are listed in the NCES Education Directory. Includes students taking work creditable toward an associate, bachelor's or higher degree, and those students enrolled in a vocational or technical program that is normally terminal and results in some other formal recognition below the baccalaureate. Students in noncredit adult education courses and noncredit extension courses are excluded. FTE enrollment as collected by HEGIS equals full-time students plus FTE of part-time students as determined by reporting institutions. FTE enrollment for fall 1983 was estimated and earlier enrollments reviewed by State Higher Education Finance Officers.

D. State and Local Government Tax Capacity, in thousands.

Source. 19__ Tax Capacity of the Fifty States, Advisory Commission on Intergovernmental Relations, Washington, D.C.

Tax capacity for 1982 was estimated based on projection of a six year plot (1975-81) of capacity values.

E. State and Local Government Tax Revenue Collected, in thousands

Source. Governmental Finances in 19--, U.S. Department of Commerce, Bureau of the Census, Washington, D.C.

Data were adjusted to conform to tax revenues as defined by the representative tax system used for establishing tax capacity.

F. State and Local Government Tax Revenues Appropriated or Levied for Operating Expenses of Public Higher Education, in thousands

Source. Appropriations of State Tax Funds for Operating Expenses of Higher Education, 19-, M.M. Chambers, Office of Research and Information, National Association of State Universities and Land-Grant Colleges, Washington, D.C.

Local government data were provided and appropriations were reviewed and adjusted by State Higher Education Finance Officers (SHEFO) in every state.

Chambers' measure of state tax appropriations is supplemented in this analysis by the addition of local government tax appropriations to higher education. In addition, state tax appropriations going to independent [redacted] education institutions and for financial aid to students attending private or out-of-state institutions (when identified) have been subtracted from the Chambers' appropriations total, since the focus here is on support to the public sector. Also, appropriations for vocational-technical schools which do not offer college-level studies (institutions not listed in the NCES Education Directory) have been excluded when identified since their enrollments are not reported by HEGIS. Appropriations have been adjusted to include actual, pending, and expected net revisions as understood on January 1, 1984.

Appropriations as collected by Chambers exclude sums derived from any source other than state tax funds. Appropriations for capital outlay are excluded; only sums appropriated for operating expenses are

included. Also excluded are, tuition charges collected by the institution and remitted to the state as an offset to the state appropriation. Sums destined for higher education but appropriated to other state agencies, e.g., fringe benefit payments in some states, are included, as are sums appropriated to statewide coordinating boards or agencies, and state scholarships or other student financial aid.

This definition includes appropriations for all activities and support elements of higher education within a state including medical centers and teaching hospitals, research institutes and laboratories, agricultural experiment stations, cooperative extension service, public television, inter-collegiate athletics, board of regents, coordinating commission, student aid, fringe benefits, etc. The funding of these support operations are only indirectly related to student count. To the extent that the financial requirements of these activities among states are proportional to enrollment mix by type of institution, adjustment of enrollments by the System Support Index establishes reasonably equivalent unit financial load and hence interstate comparability of funding per adjusted student.

Note. In a few instances, states have been encouraged to adjust proportionately downward any massive sums appropriated for public service programs such as indigent patient hospital care, when the activity supported is essentially a state level public service with little or no relevance to university operations or programs, and the finances involved are clearly atypical, not comparable, and if included would seriously distort per student amounts.

G. State Higher Education System Support Index.

Source: Derived from U.S. Department of Education, National Center for Education Statistics FY 1982 finance and fall 1981 enrollment data. Institutions classified and data computed by the National Center for Higher Education Management Systems (NCHEMS) Boulder, Colorado. Contact Officer: Paul Brinkman.

The System Support Index recognizes differences in appropriation support requirements and tuition charges for ten types of institutions defined as follows:

The four types of universities are institutions granting a minimum of 30 doctoral level degrees (including first professional medical) on an annual basis in three or more program areas.

* Research/Hospital Universities--Eighteen doctoral granting institutions having sponsored research programs exceeding $28 million and having a major hospital with more than $50 million expenditures; or, having research and hospital expenditures totaling more than $130 million.
* Research Universities--Twenty-nine doctoral granting institutions having sponsored research programs exceeding $33 million annually.
* Intermediate Universities--Thirty-two doctoral granting institutions having sponsored research programs between $11 and $30 million and total educational and general expenditures generally greater than $100 million.
* Small Universities--Thirty one doctoral granting institutions having sponsored research programs less than $11 million and total educational and general expenditures generally less than $100 million.

* Comprehensive--institutions with strong, diverse graduate programs awarding primarily masters degrees. Must grant a minimum of 30 post-baccalaureate degrees in 3 or more fields or have an interdisciplinary program at the post-baccalaureate level.

* General Baccalaureate--institutions that primarily emphasize general undergraduate education and are not engaged in significant amounts of graduate education.

The two types of two-year institutions confer over 75 percent of their awards for associate and/or certificate level study.

* Two-Year Academic and Comprehensive--institutions emphasizing associate and certificate degrees. The number of degrees awarded in academic areas must be 20 percent or more of all degrees awarded.
* Two-Year Occupational--institutions emphasizing occupational training.

* Health Professional -- institutions which are primarily engaged in health science education and which confer first-professional medical degrees

* Other Professional and Specialized -- a diverse group of specialized institutions such as education, engineering, divinity, business, art, music, law schools, and other health schools (not awarding any first professional medical degrees).

To compute the index, a constructed financial load per student is first derived for each state by multiplying the enrollment at each type of institution within the state by the respective national average appropriation and tuition rates, summing the derived products, and dividing by the state's total enrollment. This constructed load divided by the average appropriations and tuition per student for all institutions for the U.S. equals the system support index. Separate indexes are developed for appropriations, tuition, and total appropriations and tuition. The fall 1981 FTE enrollment mix for each state and the 1981-82 national average appropriations and tuition rates per student used in index compilation are shown in the table on the following page.

Note: Separate system support indexes are calculated for appropriations and tuition. This leads to a slight inconsistency. Appropriations (APP) and tuition (TUITION) are separately converted from actual dollars per FTE student to dollars per adjusted FTE student using the relevant components of the System Support Index. The final OUTPUT measure reports appropriations plus tuition revenues adjusted by the System Support Total Index. However, adjusted appropriations added to adjusted tuition does not exactly equal the adjusted total dollar OUTPUT. This is because the sum of parts each adjusted by an individual index does not exactly equal the total adjusted by a single total index. This inconsistency must be accommodated when more than one index of this type is employed.

H. Tuition Revenues.

Source: Tuition and fees--Financial Statistics of Institutions of Higher Education, U.S. Department of Education, National Center for Education Statistics, Washington, D.C. Tuition revenues for FY 1984 were estimated and earlier revenues reviewed by State Higher Education Finance Officers (SHEFO).

State public FTE enrollment perce
state and local government app

State	Research/ Hospital
ALABAMA	8.6%
ALASKA	.0%
ARIZONA	22.1%
ARKANSAS	.0%
CALIFORNIA	7.5%
COLORADO	.0%
CONNECTICUT	.0%
DELAWARE	.0%

Tuition and fees, as collected by NCES, include all tuition and fee charges assessed against students for the current operating purposes of public institutions of higher education listed in the NCES Education Directory. Included are tuition and fees which are remitted to the state as an off-set to the state appropriations. Charges for room, board, and other services rendered by auxiliary enterprises are not reported.

The above definition has been modified for this study to represent net tuition and fees by the following two adjustments: (1) amounts of tuition waived or discounted by public institutions are excluded (these are phantom figures representing no additional actual dollar revenues available to the institution), and (2) state appropriated student financial aid provided students attending in-state public institutions is excluded (this aid is included within state appropriations).

Note: To establish comparability for the few states that extensively use tuition and fees as capital debt service "revenues," they have been advised to include tuition for this purpose and reduce offsetting appropriations by an equal amount. In effect this assigns tuition in all states the consistent exclusive role of supporting current operations.

Comparability of Data

The significant technical and structural differences among states in their postsecondary education systems, financing structures, and accounting practices reduce the validity of comparative studies. Substantial progress is being made toward reducing technical differences by tightening definitions and encouraging responsible reporting and state review.

Inherent structural differences, however, cannot be equated by improved data collection. Comparability here is usually established by "adjusting" the data in some manner to account for the different ways in which the states organize to provide higher education. Here, also, progress is being made by improvements in the System Support Index used in this model. But the problem of universe definition remains.

Outlined below, in order of seriousness, are the major remaining problems impairing the comparability of data used in this study. Some of these problems cannot be resolved because of the conflict between the complexities of financing higher education and a model limited by the intended purposes of this study. But problems of a technical nature could be resolved simply by refinement of definitions by collecting agencies and reporting institutions.

Structural Problems

1. The higher education universe of accredited institutions used in this study is reported by the Education Directory, Colleges and Universities published by the National Center for Education Statistics. The Directory includes 2-year vocational-technical institutes that are nationally accredited and that award associate degrees. Enrollment in this universe includes only students taking degree credit courses. The Directory universe excludes vocational-technical institutes and area vocational centers that are not accredited and do not award an associate degree.

Because the included and excluded vocational-technical institutes have some similar academic programs, there is inconsistency in the institutional universe at the program level. And since entire state systems of these types of institutions fall in one category or the other, the problem is significant. States with a sizeable proportion of enrollments in technical institutes excluded from the universe are: Alabama, Arkansas, Colorado, Kansas, Kentucky, Louisiana, Minnesota, Oklahoma, South Dakota, Tennessee, Utah, Vermont, and Washington. For these states, the exclusion of such schools results in a lower attendance rate, a higher system support index, a lower allocation rate, and higher appropriations and tuition per student than would have occurred had they been included.

This inconsistency in the universe from an academic program standpoint and its effect on the indexes of this study are recognized. However, at present, argument in favor of continued use of the higher education universe as defined by the NCES Directory is persuasive. In most states the excluded vocational-technical institutes are not considered an integral part of the higher education system. They are usually independently organized, planned, and funded. More important, these schools are strictly occupational oriented with little or no general education or collegiate mission, and they are not accredited, two fundamental attributes of all institutions in the higher education universe. Thus, for most states exclusion of these institutes is reasonable and defendable from both a practical and philosophical standpoint.

2. Tax revenues as reported in this study do not represent the total fiscal resources available to a state to support public services. Nontax revenues* and Federal revenue sharing funds, which vary greatly from state to state, are not included. Although these revenues are often designated for special uses, they may offset the need for tax funds for other public service requirements including higher education. Thus, total revenues may be a more valid measure of state resources available to support public higher education than tax revenues alone. Arguments against inclusion of nontax revenues are based on two factors: (1) taxes are the near-exclusive source of revenues for appropriations for higher education, and (2) tax rates, and hence total tax revenues, are probably not significantly affected by the amount of nontax revenues collected.

3. This study presents total tuition payments without distinguishing between resident and nonresident components, which clouds the interpretation of average tuition per student. States with a large proportion of nonresident students have a reported average tuition level that is substantially above that for residents. This composite average can easily be misunderstood. However, the purpose here is to report the financial role of aggregate tuition revenues (versus state appropriations), and no inference of precise per student tuition rates should be made from the data.

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* Nontax revenues are receipts from such diverse sources as fees and charges, rents, fines, interest earnings, and net profits from government-operated utilities, gas and water companies, lotteries, and liquor stores. Tuition payments are a form of nontax revenue.

4. A number of secondary factors that indirectly influence state financing of higher education are not included in the model given its focus on early reporting and analysis of basic data. The principal factor that is excluded is the private sector and its role in providing postsecondary education opportunities that complement and thereby offset state public higher education responsibilities. States with large private sectors recognize the shared responsibility to residents and design their public systems accordingly. The multiple effects of a strong in-state private sector on virtually all of the variables in this model are not now taken into account, and development of adjusting factors appears particularly difficult.

To be strictly comparable, financial data should reflect only quality and program activities controlled through the exercise of institutional management and budget level. Ideally, all other independent external factors should be standardized. However, this is not possible and comparability is accordingly reduced. For example, not taken into account in this study is the demographic factor of population density, which in sparsely settled states requires cost duplicating, multiple, dispersed institutions, and permits in heavily populated states large institutions with attendant economies of scale. Also, no effort has been made here to correct for the effects of geographic location on heating and cooling requirements, snow removal, and the like.

Finally, there are a number of effects on funding requirements, and thus on comparability, caused by variations in financing practices. Capital expenditures is one example. Although the appropriations presented exclude plant investment, the approach used by each state to finance capital costs influences its current operations funding. Some states finance capital costs through direct appropriations to institutions, others through revenue bonds or direct state expenditures. A few states use tuition for capital bond "revenues" which results in a larger requirement for appropriations for operations than would be needed if tuition were used for this purpose.

Technical Problems

Resolution of some immediate comparability problems is attempted in this study by refining certain financial definitions from those currently used by institutions and collecting agencies. Thus attention is given to reporting as tuition and fees, tuition payments remitted to the state and reappropriated; avoidance of double counting state financial aid to students as both an appropriation and tuition; reporting sums destined for colleges and universities such as fringe benefits but appropriated to another agency; exclusion of tuition and fee amounts waived or discounted; and exclusion of atypical massive sums for public services such as indigent patient care.

Two major technical problems remaining with initial recommendations are:

1. This study attempts to provide the basic factors governing state support of public institutions. The education programs of these institutions are recognized as the core activity and financial requirements are accordingly measured by student enrollment. Enrollment is adjusted by

the System Support Index to account for the varying funding requirements of the different types of institutions. The index does well in accounting for the added costs of smaller classes, greater faculty experience, and additional equipment at the graduate and professional academic levels. A fairly uniform progression in costs does occur for these education inputs as advancement is made from the two-year college to the major research university. However, the index is far less successful in adjusting for the more highly varied funding patterns of research, experiment stations, public service, university hospitals, and similar operations. Because of the extreme range of funding for these activities and the highly individual university requirements brought about by state geography, history, occupational profile, etc., the author believes that funding for these non-student related activities should be separately detailed and excluded from interstate financial comparisons.

An initial step in this direction, and recommended to NCES, is the separation of finances for student related educational and general operations from the finances of ancillary proprietary activities such as auxiliary enterprises and hospitals, which are largely self-supporting and consumer oriented. For educational and general financing, revenues from the six major sources would be detailed by intended use for instruction and support, research and development, public service, and student aid. For ancillary operations, revenues from all sources would be reported as a total. Such an organization for reporting financial data would be as follows:

EDUCATIONAL AND GENERAL

	Intended purpose			
Source	Instruction & Support[1]	Research & Development[2]	Public Service	Student Aid[3]
Tuition				
Federal				
State Govt				
Local Govt				
Pvt Gifts/...				
Endowment				

[1] Instruction, libraries and other academic support, student services, institutional support, and operation and maintenance of the plant.
[2] Includes Federally funded R&D Centers under institutional financial control.
[3] Scholarships, fellowships, college work-study. Excludes loans.

ANCILLARY AND PROPRIETARY OPERATIONS

	Intended purpose			
	Sales and Services of Educ Activities	Auxiliary Enterprises	Hospitals	Other
All Sources				

2. Opening fall FTE enrollment does not represent a full year student load and the NCES Higher Education General Information Survey (HEGIS) does not establish a standard definition for "full-time-equivalent student." The varying size of summer school programs are not reflected in a single enrollment count. Fall enrollment understates the student load for states with large summer school programs, and overstates load where summer programs are small. To the extent that institutions use different formulas for identifying FTE's, their FTE enrollment data lack comparability. Most institutions likely use similar conversions of part-time to full-time-equivalents (roughly one-third), which reduces the seriousness of this inconsistency. However, standardized conversion, perhaps by credit hour and academic level, would materially improve the comparability of this critical data component.

Geographical Price Index

The model presented in this study is intended to include the basic measurable factors affecting state financing of higher education. An eighth factor--a geographical price index--is recognized as an important future addition. This section defines this index and explains how interstate comparisons of financial data would be improved by its use.

GEOGRAPHICAL PRICE INDEX (An index to reflect differences in purchasing power among states due to geographical variation in the prices paid by colleges and universities for the same goods and services.) Currently unavailable.

The cost of providing public education varies considerably from state to state. Because higher education is labor intensive, much of this variation is due to differences in wages paid to faculty and administrators. Wages vary across the country as the result of such factors as unionization, the urbanization of an area, differences in cost-of-living, and the climate and social attractiveness of an area. Prices paid by colleges and universities for raw materials, energy, construction, and equipment also vary depending on proximity to supplier and local demand.

A geographical price index would compare the prices paid for the same goods and services in different locations, where the amount and quality of these goods and services are equal. (The fact that the business of higher education is conducted somewhat differently from one place to another because climate and terrain impose different requirements for heating, cooling, snow removal, etc., is not considered in a price index.) For higher education, a price index would report differences among states in the prices paid for exactly the same mix of faculty and administrators of equivalent quality performing the same work, together with the prices paid for all other items of fixed description purchased in the educational market basket. The difficulty of holding quality constant has prevented construction of such an index, although some investigation has been made.

A geographical price index could be used to adjust state and local government appropriations and tuition revenues to reflect equivalent purchasing power. From exploratory studies, values of a price index for public services have ranged from as much as 45 percent above the national average (Alaska) to 20 percent below for a number of states. Approximately 15 states might exceed ±10% of the national average. Given this degree of variance, interstate comparability of higher education financing would be vastly improved if such an index were available.

TABLE 1
SEVEN FACTORS IN STATE SUPPORT OF PUBLIC HIGHER EDUCATION 1983-84

11

Resident Student
High School Grad
Spring 1982

1. MINNESOTA
2. WISCONSIN
3. IOWA
4. DELWARE
5. NORTH DAKOTA
6. SOUTH DAKOTA

TABLE 1
SEVEN FACTORS
IN STATE
SUPPORT OF
PUBLIC HIGHER
EDUCATION
1983-84

#3
System Support I
1981-82

1. NEBRASKA
2. UTAH
3. MARYLAND
4. IOWA
5. LOUISIANA
6. NEW MEXICO
7. GEORGIA
8. KANSAS
9. MINNESOTA

TABLE 1

SEVEN FACTORS IN STATE SUPPORT OF PUBLIC HIGHER EDUCATION 1983-84

#5

Tax Effort

1982

1. NEW YORK
2. D.C.
3. ALASKA
4. RHODE ISLAN
5. WISCONSIN
6. MASSACHUSET
7. HAWÀII
8. MICHIGAN

TABLE 1
SEVEN FACTORS
IN STATE
SUPPORT OF
PUBLIC HIGHER
EDUCATION
1983-84

APP
Appropriations pe
1983-84
(TAX x #6/ENROLL

1. ALASKA
2. D.C.
3. WYOMING
4. NEW YORK
5. HAWAII
6. KENTUCKY
7. TEXAS
8. NEW JERSEY

TABLE 1
SEVEN FACTORS IN STATE SUPPORT OF PUBLIC HIGHER EDUCATION 1983-84

OUTPUT
Appropriati
Per Student
1983-84
(APP + TUIT

1. ALASKA
2. D.C
3. WYOMING
4. NEW YOR
5. PENNSYL
6. NEW JER
7. KENTUCK
8. VERMONT

TABLE 2
SEVEN FACTORS IN STATE SUPPORT OF PUBLIC HIGHER EDUCATION
1983-84

	#1 Resident Student Source High School Grad HS Grads per 1,000 pop.	Inde
ALABAMA	12.5	97
ALASKA	12.3	95
ARIZONA	10.3	80

TABLE 2.
SEVEN FACTORS IN STATE SUPPORT OF PUBLIC HIGHER EDUCATION 1983-84

#6
Allocation
Public High
Education

	Percent of tax revenue	Ind
ALABAMA	14.5	142
ALASKA	5.7	55
ARIZONA	14.7	144

TABLE 3

A

THE BASIC DATA
1983-84

	Resident Population July* (000)
ALABAMA	3,946
ALASKA	443
ARIZONA	2,891
ARKANSAS	2,304
CALIFORNIA	24,576
COLORADO	3,065

TABLE 4

SEVEN FACTORS IN STATE SUPPORT OF PUBLIC HIGHER EDUCATION

HISTORICAL

#1

Resident Student Source High School Grads

HS Grads per 1,000 pop.

Index

ALABAMA	1977-78	13.2	93
	1979-80	12.7	91

TABLE 4

SEVEN FACTORS IN STATE SUPPORT OF PUBLIC HIGHER EDUCATION

HISTORICAL

#6

Allocation

Public Hig

Education

Percent

of tax

revenue In

TABLE 4
SEVEN FACTORS
IN STATE
SUPPORT OF
PUBLIC HIGHER
EDUCATION
HISTORICAL

		#1 Resident Student Source-Hig School Gra	
		HS Grads per 1,000 pop.	Ind
CONNECTICUT	1977-78	15.6	11C
	1979-80	15.1	109

TABLE 4

SEVEN FACTORS IN STATE SUPPORT OF PUBLIC HIGHER EDUCATION HISTORICAL

		#6 Allocation to Public Higher Education	Percent of tax revenue Inde
CONNECTICUT	1977-78	6.6	64
	1979-80	6.6	62

TABLE 4

SEVEN FACTORS IN STATE SUPPORT OPF PUBLIC HIGHER EDUCTION HISTORICAL

#1

Resident Student Source High School Grads

66 Grads per 1,000 pop. - Index

TABLE 4
SEVEN FACTORS
IN STATE
SUPPORT OPF
PUBLIC HIGHER
EDUCTION
HISTORICAL

#6
Allocation
Public Hig
Education

Percent
of tax

TABLE 4
SEVEN FACTORS
IN STATE
SUPPORT OPF
PUBLIC HIGHER
EDUCTION
HISTORICAL

#1
Resident
Student
Source Hlg
School Gra

HS Grads
per
1,000
pop. Ind

	#6 Allocation to Public Higher Education		APP Appropriations per student (TAX x #6/ENROL)			#7 Tuition Factor		TUITION Estimated Tuition per student APP (TUITION FACTOR - 1.00)			OUTPUT Appropriations & Est. Tuition per student Adj (APP + TUITION)		INPUTS Potential Tax Revenues per student Adj (#4/#1x#2x#3)	
	Percent of tax revenue	Index	Dollars per student Actual	Adj	Index	Factor value	Index	Dollars per student Actual	Adj	Index	Dollars per student Adjusted	Index	Dollars per student Adjusted	Index
1977-78	10.9	105	2,300	1,933	76	1.23	99	518	471	77	2,408	76	22,645	92
1979-80	12.2	115	3,025	2,542	83	1.20	98	613	557	78	3,110	83	27,358	95
1980-81	12.9	117	3,481	2,925	90	1.20	96	685	623	79	3,560	88	28,147	95
1981-82	13.2	121	3,739	3,142	90	1.20	96	729	663	77	3,819	88	31,149	97
1982-83	12.0	116	3,920	3,294	92	1.23	97	893	812	86	4,114	91	36,264	105
1983-84	11.3	111	3,966	3,333	87	1.24	98	958	871	83	4,209	86	40,693	108
1977-78	6.3	61	1,879	2,185	86	1.48	119	896	943	154	3,154	100	30,680	125
1979-80	6.9	65	2,331	2,710	89	1.45	118	1,055	1,110	156	3,847	102	35,312	123
1980-81	7.2	65	2,551	2,967	91	1.47	119	1,207	1,271	161	4,271	106	36,952	125
1981-82	6.8	63	2,679	3,115	89	1.52	122	1,391	1,464	170	4,625	106	40,057	125
1982-83	6.8	66	2,970	3,454	96	1.52	120	1,535	1,616	172	5,120	113	43,803	126
1983-84	6.6	64	3,086	3,588	93	1.52	120	1,609	1,694	162	5,335	109	47,079	125
1977-78	8.7	84	2,344	1,906	75	1.34	108	808	824	135	2,671	85	20,294	82
1979-80	9.7	91	2,870	2,333	76	1.32	107	907	926	130	3,201	85	23,587	82
1980-81	10.3	94	3,222	2,619	81	1.31	105	997	1,017	129	3,575	89	24,322	82
1981-82	9.9	90	3,326	2,704	77	1.33	107	1,103	1,125	131	3,753	86	26,330	82
1982-83	10.2	98	3,625	2,947	82	1.34	106	1,216	1,241	132	4,102	90	28,044	81
1983-84	9.6	94	3,640	2,960	77	1.36	107	1,314	1,340	128	4,198	86	29,860	79
1977-78	6.4	62	2,778	3,087	121	1.17	95	484	510	83	3,585	113	35,031	142
1979-80	6.6	62	3,349	3,721	122	1.17	95	582	612	86	4,320	115	39,393	137
1980-81	6.3	58	3,314	3,682	113	1.19	96	640	674	86	4,345	108	39,868	135
1981-82	6.3	58	3,494	3,883	111	1.21	97	723	761	88	4,635	107	45,279	142
1982-83	6.0	57	3,659	4,066	113	1.22	97	802	845	90	4,903	108	50,317	145
1983-84	6.8	66	3,948	4,387	114	1.21	95	810	852	81	5,228	107	51,066	136
1977-78	9.9	96	2,271	2,341	92	1.43	115	981	962	157	3,319	105	22,952	93
1979-80	9.7	91	2,750	2,835	93	1.42	115	1,158	1,135	160	3,987	106	26,387	92
1980-81	8.2	75	2,497	2,575	79	1.52	123	1,310	1,284	163	3,885	96	27,294	92
1981-82	8.4	77	2,648	2,730	78	1.52	122	1,377	1,350	157	4,107	94	27,880	87
1982-83	8.6	83	2,970	3,062	85	1.52	121	1,544	1,514	161	4,606	101	30,346	88
1983-84	8.9	87	3,243	3,343	87	1.50	118	1,607	1,575	150	4,948	101	32,104	85
1977-78	9.2	88	2,642	2,338	92	1.23	100	620	516	84	2,861	91	21,438	87
1979-80	9.4	89	3,135	2,774	91	1.23	100	726	605	85	3,386	90	25,352	88
1980-81	8.7	79	3,047	2,697	83	1.25	101	761	635	81	3,341	83	26,586	90
1981-82	9.0	83	3,165	2,800	80	1.27	102	849	707	82	3,521	81	27,673	87
1982-83	9.2	88	3,333	2,949	82	1.29	103	982	818	87	3,784	83	29,324	85
1983-84	9.4	91	3,891	3,443	89	1.30	102	1,154	961	92	4,425	90	32,998	88

TABLE 4
SEVEN FACTORS
IN STATE
SUPPORT OF
PUBLIC HIGHER
EDUCATION
HISTORICAL

	#1	
	Resident Student Source High School Grads per 1,000 pop.	In
MISSISSIPPI	1977-78	12.1

TABLE 4 .
SEVEN FACTORS
IN STATE
SUPPORT OF
PUBLIC HIGHER
EDUCATION
HISTORICAL

#6
Allocatio
Public Hi
Education

Percent
of tax
revenue i

TABLE 4
SEVEN FACTORS
IN STATE
SUPPORT OF
PUBLIC HIGHER
EDUCATION
HISTORICAL

#1
Resident
Student
Source Hig
School Gra

HS Grads
per
1,000
pop. Inc

TABLE 4

SEVEN FACTORS IN STATE SUPPORT OF PUBLIC HIGHER EDUCATION HISTORICAL

Allocation
Public Hig
Education

Percent
of tax
revenue i

TABLE 4
SEVEN FACTORS
IN STATE
SUPPORT OF
PUBLIC HIGHER
EDUCATION
HISTORICAL

	#1	Resident	Student	Source HI	School Gr	HS Grads per 1,000 pop.	In
OKLAHOMA	1977-78	13.6					

TABLE 4

SEVEN FACTORS IN STATE SUPPORT OF PUBLIC HIGHER EDUCATION HISTORICAL

#6

Allocatio

Public Hi

Education

Percent of tax revenue

TABLE 4

SEVEN FACTORS
IN STATE
SUPPORT OF
PUBLIC HIGHER
EDUCATION
HISTORICAL

#1 Resident Student Source High School Grads		
HS Grads per 1,000 pop.	Index	

TABLE 4

SEVEN FACTORS IN STATE SUPPORT OF PUBLIC HIGHER EDUCATION

HISTORICAL

#6

Allocation Public Higher Education

Percent of tax revenue Inc

TABLE 4

SEVEN FACTORS

IN STATE

#1

Resident

Student

TABLE 4 #6

SEVEN FACTORS Allocatio

TABLE 5

THE BASIC DATA
HISTORICAL

		A Resid Popul July* (000)
ALABAMA	1977-78	3,73
	1979-80	3,83
	1980-81	3,86
	1981-82	3,89

TABLE 5

A

THE BASIC DATA

HISTORICAL

Resid

Popul

July*

(000)

CONNECTICUT	1977-78	3,08
	1979-80	3,09
	1980-81	3,10

TABLE 5

A

THE BASIC DATA
HISTORICAL

Resi
Popu
July
(000

IDAHO	1977-78	8
	1979-80	9
	1980-81	9

TABLE 5

THE BASIC DATA HISTORICAL

		A Resi Popu July (000
LOUISIANA	1977-78	3,9
	1979-80	4,0
	1980-81	4,1

TABLE 5 A

THE BASIC DATA
HISTORICAL

		Resi Popu July (000
MISSISSIPPI	1977-78	2,4
	1979-80	2,4
	1980-81	2,5
	1981-82	2,5
	1982-83	2,5

TABLE 5 A

THE BASIC DATA
HISTORICAL

		'Resider Popula July* (000)
NEW JERSEY	1977-78	7,344
	1979-80	7,356
	1980-81	7,373
	1981-82	7,377

TABLE 5

THE BASIC DATA HISTORICAL

OKLAHOMA	1977-78	2,8
	1979-80	2,9
	1980-81	2,9
	1981-82	3,0
	1982-83	3,1

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DATA	A Resident Population July* (000)	B High School Graduates Spring*	C FTE Public Enrollment Fall	D Tax Capacity FY* (000,000)	E Tax Revenues FY* (000,000)	Fa State Appro-priations (000,00)	Fb Local Appro-priations (000,000)	F State & Local Appro-priations (000,000)	Ga System Support Index FY* Appn.	Gt Tuition	G Total
1977-78	4,329	54,279	110,489	2,584.7	2,078.2	253.8	0.0	253.8	1.07	1.04	1.06
1979-80	4,462	51,346	116,367	3,019.3	2,538.4	323.5	0.0	323.5	1.07	1.04	1.06
1980-81	4,533	52,400	119,404	3,177.6	2,758.5	325.9	0.0	325.9	1.07	1.04	1.06
1981-82	4,595	55,061	118,147	3,448.5	2,902.6	352.0	0.0	352.0	1.07	1.04	1.06
1982-83	4,612	56,192	117,351	3,748.0	3,262.0	370.7	0.0	370.7	1.07	1.04	1.06
1983-84	4,653	56,881	117,674	4,091.4	3,410.2	387.0	0.0	387.0	1.07	1.04	1.06
1977-78	12,903	165,169	431,912	10,766.9	7,258.6	1,039.9	45.5	1,085.4	1.08	0.99	1.06
1979-80	13,498	172,782	437,945	12,931.0	8,303.5	1,302.6	55.5	1,358.1	1.08	0.99	1.06
1980-81	13,887	175,077	450,669	14,045.4	9,045.2	1,451.7	67.2	1,518.9	1.08	0.99	1.06
1981-82	14,321	178,356	458,358	16,723.5	10,858.7	1,887.8	79.6	1,967.4	1.08	0.99	1.06
1982-83	14,766	178,919	482,883	20,081.0	12,969.0	2,016.5	86.4	2,102.9	1.08	0.99	1.06
1983-84	15,279	179,339	490,000	22,901.0	14,560.6	2,320.9	94.5	2,415.4	1.08	0.99	1.06
1977-78	1,272	20,108	45,108	814.4	727.7	117.1	0.0	117.1	1.17	1.31	1.20
1979-80	1,364	20,556	45,631	1,001.8	914.0	140.2	0.0	140.2	1.17	1.31	1.20
1980-81	1,416	20,469	48,247	1,057.8	1,057.8	156.1	0.0	156.1	1.17	1.31	1.20
1981-82	1,472	20,487	49,144	1,195.0	1,208.9	176.1	0.0	176.1	1.17	1.31	1.20
1982-83	1,518	19,667	52,018	1,351.0	1,310.0	196.8	0.0	196.8	1.17	1.31	1.20
1983-84	1,563	19,443	52,280	1,496.1	1,454.2	204.5	0.0	204.5	1.17	1.31	1.20
1977-78	485	7,687	13,804	324.5	353.2	21.1	0.2	21.3	1.04	1.23	1.08
1979-80	498	7,918	13,656	361.4	374.5	24.7	0.2	24.9	1.04	1.23	1.08
1980-81	506	7,925	14,120	374.5	410.0	26.5	0.2	26.7	1.04	1.23	1.08
1981-82	512	7,796	14,170	411.2	428.3	29.8	0.2	30.0	1.04	1.23	1.08
1982-83	516	7,345	13,984	446.0	469.0	32.4	0.2	32.6	1.04	1.23	1.08
1983-84	518	7,434	14,288	478.5	525.3	34.7	0.3	35.0	1.040	1.230	1.080
1977-78	5,133	69,450	156,357	3,397.0	3,065.5	324.7	0.0	324.7	1.01	1.06	1.02
1979-80	5,284	69,178	161,453	4,011.6	3,774.0	433.2	0.0	433.2	1.01	1.06	1.02
1980-81	5,325	71,399	168,045	4,276.7	3,778.3	499.6	0.0	499.6	1.01	1.06	1.02
1981-82	5,362	71,073	174,334	4,818.1	4,256.0	529.4	0.0	529.4	1.01	1.06	1.02
1982-83	5,430	71,657	172,438	5,262.0	4,709.0	572.3	0.0	572.3	1.01	1.06	1.02
1983-84	5,479	72,340	173,703	5,732.5	5,123.9	598.6	0.0	598.6	1.01	1.06	1.02
1977-78	3,691	53,292	154,831	2,655.1	2,629.6	380.3	0.0	380.3	0.96	0.96	0.96
1979-80	3,886	53,143	167,379	3,270.9	3,117.0	456.9	0.0	456.9	0.96	0.96	0.96
1980-81	4,013	53,801	175,155	3,595.5	3,463.0	451.8	0.0	451.8	0.96	0.96	0.96
1981-82	4,148	53,297	160,526	4,041.3	3,788.0	443.1	0.0	443.1	0.96	0.96	0.96
1982-83	4,217	53,143	150,008	4,304.0	3,962.0	443.7	0.0	443.7	0.96	0.96	0.96
1983-84	4,283	53,245	152,912	4,671.9	4,473.5	561.7	0.0	561.7	0.96	0.96	0.96

TABLE 5

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THE BASIC DATA

HISTORICAL

		Resi	Popul	July*	(000)
WEST VIRGINIA	1977-78	1,87			
	1979-80	1,92			
	1900-81	1,93			
	1981-82	1,95			
	1982-83	1,95			